October 31, 2003

Mr. Bill Storm
Department of Administration
Environmental Quality Board
658 Cedar Street, Room 300
St. Paul, MN 55155

Dear Mr. Storm:

HDR, Inc appreciates the opportunity to respond to the comments from Susan Heffron, PCA Technical Representative to the MEQB, on the NGPP Minnesota Biomass project.

Ms. Heffron's letter, dated October 15, 2003, requested additional information about several aspects of the proposed plant's construction and operation: type of agricultural biomass used to fuel the plant; additional information on the type of stormwater runoff controls that the plant will use; air pollution control equipment; hazardous air pollutant emissions; air emissions risk analysis; and noise calculations. Our response to these comments is as follows:

Agricultural Biomass: In addition to wood and wood wastes, the plant will also use agricultural biomass for a portion of the fuel. Agricultural biomass will consist of plant-derived materials.

Ms. Heffron also expressed some concern that the removal of corn stalks from farm fields may result in soil erosion and sedimentation in surface water from wind and precipitation. NGPP Minnesota Biomass, LLC (NGPP) does not believe that the project will result in significant erosion impacts to area farm fields. Based on discussions with parties currently collecting corn stover for animal bedding use, NGPP believes aggressive "raking" or collection of corn stover will result in excessive dirt included in the fuel, which is undesirable for NGPP's boiler operation. Therefore, NGPP intends to direct suppliers of corn stover to use less aggressive collection techniques to collect any corn stover provided to the plant as fuel. NGPP estimates that of the 3 tons per acre that remain after the corn harvest, approximately 1 ton per acre would be collected, thus minimizing the amount of dirt received with the fuel and diminishing the potential for soil erosion and sedimentation in surface water from wind and precipitation.

Surface Water Runoff: The project is still in the design phase. The primary function of the proposed stormwater pond is to meet the requirements outlined in "General Permit Authorization to Discharge Storm Water Associated with Construction Activity under the National Pollutant Discharge Elimination System/State Disposal System Permit Program" issued August 1, 2003. The chemical make up of the water reaching the pond is unknown at this time. If, as the facility design progresses, it is determined that the quality of the water expected to be collected in the stormwater pond is not of sufficient quality to discharge directly to the Le Sueur River other preventative, discharge, or treatment measures will be used. Detailed plans and specifications will be submitted with the NPDES permit application prior to the commencement of construction.

Hazardous Air Pollutant Emissions: A detailed listing of HAP emissions has been included in Appendix C of the Air Emissions Permit Application, which was submitted on August 29, 2003. The primary basis for the HAP emission factors included in the application was the EPA Compilation of Air Pollutant Emission Factors, AP42, Chapter 1.6, Wood Residue and Combustion in Boilers, 3/02. The following table provides a summary of HAPs emissions from the project.

6190 Golden Hills Drive
Minneapolis, MN 55416-1567

Phone: (763) 591-5400
Fax: (763) 591-5413
www.hdrinc.com

Table 1. HAP Emissions.

Pollutant	Emission Factor	Emission Rate	
	lb/MMBtu	lb/hr	tpy
Acetaldehyde	8.30E-04	0.43778	1.91749
Acetophenone	3.20E-09	0	0.00001
Acrolein	2.28E-05	0.01203	0.05267
Anthracene	3.00E-06	0.00158	0.00693
Antimony	7.90E-06	0.00417	0.01825
Arsenic	2.20E-05	0.0116	0.05083
Benzene	4.20E-03	2.21529	9.70297
Benz(a)anthracene	6.50E-08	0.00003	0.00015
Benzo(b)fluoranthene	1.00E-07	0.00005	0.00023
Benzo(b,k)fluoranthene	2.00E-09	0	0
Benzo(k)fluoranthene	3.60E-08	0.00002	0.00008
Benzo(j,k)fluoranthene	1.60E-07	0.00008	0.00037
Benzo(g,h,i)perylene	9.30E-08	0.00005	0.00021
Benzo(a)pyrene	2.60E-06	0.00137	0.00601
Benzo(e)pyrene	2.60E-09	0	0.00001
Beryllium	1.10E-06	0.00058	0.00254
Bis(2-Ethylhexyl)phthalate	4.70E-08	0.00002	0.00011
Bromomethane	1.50E-05	0.00791	0.03465
2-Butanone (MEK)	5.40E-06	0.00285	0.01248
Carbon Tetrachloride	4.50E-05	0.02374	0.10396
Cadmium	4.10E-06	0.00216	0.00947
Chlorine	7.90E-04	0.41669	1.82508
Chlorobenzene	3.30E-05	0.01741	0.07624
Chloroform	2.80E-05	0.01477	0.06469
Chloromethane	2.30E-05	0.01213	0.05314
Chromium	2.10E-05	0.01108	0.04851
Chromium IV	3.50E-06	0.00185	0.00809
Chrysene	3.80E-08	0.00002	0.00009
Cobalt	6.50E-06	0.00343	0.01502
Dibenzo(a,h)anthracene	9.10E-09	0	0.00002
1,2-Dibromoethane	5.50E-05	0.02901	0.12706
1,2-Dichloroethane	2.90E-05	0.0153	0.067
Dichloromethane	2.90E-04	0.15296	0.66997
1,2-Dichloropropane	3.30E-05	0.01741	0.07624
7,12 Dimethylbenz(a)anthracene	1.60E-08	0.00001	0.00004
2,4-Dinitrophenol	1.80E-07	0.00009	0.00042
Ethylbenzene	3.10E-05	0.01635	0.07162

Pollutant	Emission Factor	Emission Rate	
	lb/MMBtu	lb/hr	tpy
Fluoranthene	1.60E-06	0.00084	0.0037
Fluorene	3.40E-06	0.00179	0.00785
Formaldehyde	4.40E-03	2.32078	10.16502
H7CDD & H6CDD	9.48E-11	0	0
H7CDF & H6CDF	1.89E-10	0	0
Hexane	1.76E-03	0.92831	4.06601
Hydrogen Chloride	1.90E-02	10.02155	43.89439
Indeno(1,2,3-c,d) pyrene	8.70E-08	0.00005	0.0002
Lead	4.80E-05	0.02532	0.11089
Manganese	1.60E-03	0.84392	3.69637
Mercury	3.50E-06	0.00185	0.00809
Naphthalene	9.70E-05	0.05116	0.22409
Nickel	3.30E-05	0.01741	0.07624
4-Nitrophenol	1.10E-07	0.00006	0.00025
OCDD	6.60E-08	0.00003	0.00015
OCDF	8.80E-11	0	0
P5CDD	9.10E-11	0	0
P5CDF	4.20E-10	0	0
Pentachlorophenol	5.10E-08	0.00003	0.00012
Phenathrene	7.00E-06	0.00369	0.01617
Phenol	5.10E-05	0.0269	0.11782
Phosphorous	2.70E-05	0.01424	0.06238
Propionaldehyde	6.10E-05	0.03217	0.14092
Selenium	2.80E-06	0.00148	0.00647
Styrene	1.90E-03	1.00216	4.38944
2,3,7,8- Tetrachloro-dibenzo-p-dioxins	8.60E-12	0	0
T4CDD	4.70E-10	0	0
2,3,7,8-Tetrachloro-dibenzo-p-furans	9.00E-11	0	0
T4CDF	7.50E-10	0	0
Toluene	9.20E-04	0.48525	2.12541
1,1,1-Trichlorophenol	3.10E-05	0.01635	0.07162
Trichloroethylene	3.00E-05	0.01582	0.06931
2,4,6-Trichlorophenol	2.20E-08	0.00001	0.00005
Vinyl Chloride	1.80E-05	0.00949	0.04158
o-Xylene	2.50E-05	0.01319	0.05776
Yttrium	3.00E-07	0.00016	0.00069

Pollution Control Equipment: The air emissions permit application submitted to the MPCA for the proposed facility contains a Best Available Control Technology (BACT) review for all applicable pollutants. NGPP is aware that final approval of the proposed BACT requirements is subject to review by the MPCA.

Air Emissions Risk Analysis: The MPCA requested that an Air Emissions Risk Analysis (AERA) be completed for the project and included in the EAW. HDR completed the AERA screening process, and NGPP submitted it to the MPCA on October 8, 2003. A copy of the AERA screening submittal is attached for your review. Based on the results of the screening, HDR believes that the project does not present a significant risk and that no more detailed analysis is required.

Noise Attenuation: HDR agrees with MPCA's comment that the windrows of fuel supply cannot be included in the noise modeling if they are removed or diminished to a level that reduces their effectiveness. HDR believes that sufficient windrows will remain to provide sound attenuation and that their inclusion in the noise modeling is appropriate. Plant layout and design will take noise attenuation into account. NGPP anticipates that noise mitigation strategies such as the location of fuel storage. landscaping and noise suppression equipment will be incorporated in the final design to ensure compliance with local and state noise ordinances.

Thank you for providing HDR with an opportunity to respond.

Sincerely,

Michelle F. Bissonnette

Michelle F. Bissonnette
Senior Environmental Consultant

Cc: Doug Ferber – NGPP
Rus Miller – NGPP
Susan Heffron – MPCA

Enc.